

REMARKS

Claims 1-16 are pending in the application. Claims 4-6 and 12-14 have been withdrawn. Claims 1 and 9 are amended herein with the support of at least paragraph [0053] of the published application US 2004/0207960. No new matter has been added.

Preliminary Matters

Please note that Applicants submit herewith (see Appendix) a document designated as "C7 – Copy of Examination Report issued on February 10, 2006 for corresponding British Patent Application No. 0600037.6 listed in Form PTO-1449 of the IDS submitted April 27, 2006. The Examiner indicates in the Office Action that this document was not previously received. If any additional fee is due, such fee may be charged to the deposit account listed on the transmittal letter accompanying this amendment.

Applicant plans to file a terminal disclaimer under 37 C.F.R. § 1.321(b) to overcome the Examiner's obviousness-type double patenting rejection based upon co-pending Application Serial Nos. 10/823,473 and 10/823,484, upon an indication of allowable subject matter.

Rejections under 35 U.S.C. § 102(b)

A. Nakatani (U.S. Patent No. 5,390,061)

Claims 1, 2, 7, 9, 10 and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Nakatani. Applicants respectfully disagree, at least in view of the amendment herein to claims 1 and 9. Independent claims 1 and 9 have been amended to recite that the GMR element is free of an antiferromagnetic layer parallel to any layers of the group of adjacent parallel layers.

The feature of being free of an antiferromagnetic layer in the GMR effect element is completely missing in Nakatani, which requires use of such a layer. Because at least one element of Applicants' claimed invention is missing from the

structure in Nakatani, Nakatani cannot anticipate Applicants' claimed invention. Accordingly, Applicants respectfully assert that claims 1, 2, 7, 9, 10, and 15 are allowable over Nakatani and request that the Examiner withdraw the rejection of the claims under 35 U.S.C. § 102(b).

B. Dill (U.S. Patent No. 5,898,548)

Claim 9 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Dill. Applicants respectfully traverse this rejection. As set forth above, independent claim 9 has been amended to recite that the GMR element is free of an antiferromagnetic layer parallel to any layers of the group of adjacent parallel layers.

The feature of being free of an antiferromagnetic layer in the GMR effect element is completely missing in Dill, which requires use of such a layer. Because at least one element of Applicants' claimed invention is missing from the structure in Dill, Dill cannot anticipate Applicants' claimed invention. Accordingly, Applicants respectfully assert that independent claim 9 is allowable over Dill and request that the Examiner withdraw the rejection of the claims under 35 U.S.C. § 102(b).

C. Saito (U.S. Patent Publication No. 2003/1013299)

Claims 9 and 11 stand rejected under 35 U.S.C. § 102(a) and/or 35 U.S.C. § 102(e) as being anticipated by Saito. Applicants respectfully traverse this rejection. As set forth above, independent claim 9 has been amended to recite that the GMR element is free of an antiferromagnetic layer parallel to any layers of the group of adjacent parallel layers.

Like Nakatani and Dill, Saito utilizes an antiferromagnetic layer in the GMR structure. This is discussed throughout the reference (e.g., paragraphs [0020], [0023], [0030], [0031], [0103], [0129], etc.) For the same reasons as set forth above, Applicants assert that Saito cannot anticipate independent claim 9 or claim 11, which depends from claim 9. Applicants therefore respectfully request that the Examiner withdraw the rejection of claim 1 under 35 U.S.C. §102(a).

D. Carey (U.S. Patent No. 6,757,144)

Claim 1 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Carey. Applicants respectfully traverse this rejection. As set forth above, independent claim 1 has been amended to recite that the GMR element is free of an antiferromagnetic layer parallel to any layers of the group of adjacent parallel layers.

Like Nakatani, Dill, and Saito, Carey utilizes an antiferromagnetic layer. This is discussed throughout the reference specification (Col. 2, lines 60-62; Col. 6, lines 37-42; Col. 6, line 66; Col. 7, lines 50-52; Col. 8, lines 35-40, etc.). For the same reasons as set forth above, Applicants assert that Carey cannot anticipate Applicants' claimed invention. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 1 under 35 U.S.C. §102(e).

4. Rejections under 35 U.S.C. § 103(a)

Claims 3, 8, 11, and 16 stand rejected as being unpatentable over Nakatani 5,390,061. At least in view of the claims as amended herein, Applicants respectfully disagree.

Applicants point out that Nakatani requires use of an antiferromagnetic layer in the parallel layers of the GMR element. Nakatani does not teach or suggest a GMR element free of an antiferromagnetic layer parallel to the group of adjacent parallel layers, and therefore a *prima facie* case of obviousness has not been established. Applicants respectfully request that the Examiner withdraw the rejection of claims 3, 8, 11 and 16 under 35 U.S.C §103(a).

5. Conclusion

Based on the above remarks, Applicants respectfully submit that the claims are in condition for allowance. The examiner is kindly invited to contact the undersigned attorney to expedite allowance.

Respectfully submitted,

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APPENDIX